

## WE CLAIM:

1. A compound comprising D-*t*-3',4'-ethylenedioxy-1-phenyl-2-palmitoylamino-3-pyrrolidino-1-propanol and functional homologues, isomers and pharmaceutically acceptable salts thereof.
- 5 2. A compound comprising D-*t*-4'-hydroxy-1-phenyl-2-palmitoylamino-3-pyrrolidino-1-propanol and functional homologues, isomers and pharmaceutically acceptable salts thereof.
- 10 3. A composition comprising a compound selected from the group consisting of D-*t*-3',4'-ethylenedioxy-1-phenyl-2-palmitoylamino-3-pyrrolidino-1-propanol, D-*t*-4'-hydroxy-1-phenyl-2-palmitoylamino-3-pyrrolidino-1-propanol, and functional homologues, isomers and pharmaceutically acceptable salts thereof.
- 15 4. The composition of Claim 3, wherein the compound is D-*t*-3',4'-ethylenedioxy-1-phenyl-2-palmitoylamino-3-pyrrolidino-1-propanol.
5. The composition of Claim 3, wherein the compound is a pharmaceutically acceptable salt of D-*t*-3',4'-ethylenedioxy-1-phenyl-2-palmitoylamino-3-pyrrolidino-1-propanol.
6. The composition of Claim 3, wherein the compound is D-*t*-4'-hydroxy-1-phenyl-2-palmitoylamino-3-pyrrolidino-1-propanol.
- 20 7. The composition of Claim 3, wherein the compound is a pharmaceutically acceptable salt of D-*t*-4'-hydroxy-1-phenyl-2-palmitoylamino-3-pyrrolidino-1-propanol.
- 25 8. A method for inhibiting the growth of cancer cells in a mammal, wherein said cancer cells are sensitive to the compounds below, comprising the step of administering to the mammal a therapeutically effective amount of a composition comprising a compound selected from the group consisting of D-*t*-3',4'-ethylenedioxy-1-phenyl-2-palmitoylamino-3-pyrrolidino-1-propanol, D-*t*-4'-hydroxy-1-phenyl-2-palmitoylamino-3-pyrrolidino-1-propanol and functional homologues, isomers and pharmaceutically acceptable salts thereof.

9. The method of Claim 8, where the growth of the cancer cells is inhibited by increasing ceramide lev ls in the cancer cells to a toxic level.

10. A method for treating a patient having sphingolipidosis by reducing glycosphingolipid synthesis comprising the step of administering to the patient a therapeutically effective amount of a composition comprising a compound selected from the group consisting of D-t-3',4'-ethylenedioxy-1-phenyl-2-palmitoylamino-3-pyrrolidino-1-propanol, D-t-4-hydroxy-1-phenyl-2-palmitoylamino-3-pyrrolidino-1-propanol and functional homologues, isomers and pharmaceutically acceptable salts thereof.

11. The method of Claim 10, wherein the patient is diagnosed as having Gaucher disease.

12. The method of Claim 10, wherein the patient is diagnosed as having Tay-Sachs disease.

13. The method of Claim 10, wherein the patient is diagnosed as having Fabry disease.

14. A method for treating a patient having a microbial or viral infection comprising the step of administering to the patient a therapeutically effective amount of a composition comprising a compound selected from the group consisting of D-t-3',4'-ethylenedioxy-1-phenyl-2-palmitoylamino-3-pyrrolidino-1-propanol, D-t-4-hydroxy-1-phenyl-2-palmitoylamino-3-pyrrolidino-1-propanol and functional homologues, isomers and pharmaceutically acceptable salts thereof.

15. A method for treating a patient having a drug resistant tumor sensitive to the compounds below, comprising the step of administering to the patient a therapeutically effective amount of a composition comprising a compound selected from the group consisting of D-t-3',4'-ethylenedioxy-1-phenyl-2-palmitoylamino-3-pyrrolidino-1-propanol, D-t-4-hydroxy-1-phenyl-2-palmitoylamino-3-pyrrolidino-1-propanol and functional homologues, isomers and pharmaceutically acceptable salts thereof.

16. A method for reducing tumor angiogenesis in a patient, wherein said angiogenesis is sensitive to the compounds below, comprising the step of administering to the patient a therapeutically effective amount of a composition comprising a compound selected from the group consisting of D-*t*-3',4'-ethylenedioxy-5 1-phenyl-2-palmitoylamino-3-pyrrolidino-1-propanol, D-*t*-4-hydroxy-1-phenyl-2-palmitoylamino-3-pyrrolidino-1-propanol and functional homologues, isomers and pharmaceutically acceptable salts thereof.

17. A vaccination method comprising the steps of:

- removing cancer cells sensitive to the compounds below, from a patient;
- treating the cancer cells *in vitro* with an effective amount of a composition comprising a compound selected from the group consisting of D-*t*-3',4'-ethylenedioxy-1-phenyl-2-palmitoylamino-3-pyrrolidino-1-propanol, D-*t*-4-hydroxy-1-phenyl-2-palmitoylamino-3-pyrrolidino-1-propanol and functional homologues, isomers and pharmaceutically acceptable salts thereof; and
- administering treated cells to the patient.